

REMARKS

Applicant has filed a request for continued examination and paid the required fee.

Claims 1-14 are pending in the application and have been rejected under 35 U.S.C.

§ 103(a) based upon the combination of United States Patent No. 4,631,108 to Colson in view of United States Patent No. 4,838,972 to Daamen et al., United States Published Application No. 2002/0014296 to Corey and United States Patent No. 4,732,630 to Schnebly.

By this amendment Applicants have amended claim 1 and cancelled claims 9-14. Claims 2-8 depend from claim 1. Claim 1 as amended requires that the overlaying surfaces of the cellular structure bond together on the collector. Claim 1 as amended also requires that the cellular structure have a curvature when that structure is removed from the collector and that the curvature flatten while the cellular structure is on a flat surface. This is not taught or suggested in any of the references.

Claims 1 and 2 were also amended to change structure to material in lines 2 and 6 because “tubular material” rather than “tubular structure” is used in lines 4 and 6 of claim 1.

Colson discloses a method of making a cellular structure in which a strip of elongated material is wrapped on a collector. There is no teaching or suggestion in Colson to use a slow cure adhesive or to remove a cellular structure having a curvature from the collector and place that structure on a flat surface where the adhesive fully cures and the curvature flattens.

Daamen was cited only to show that it was known to wind tubular material around a circular mandrel. (See Office Action at page 3). Daamen also does not teach or suggest to use a

slow cure adhesive or to remove a cellular structure having a curvature from the collector and place that structure on a flat surface where the adhesive fully cures and the curvature flattens.

Schnebly also discloses a method of making a cellular structure in which a strip of elongated material is wrapped on a collector. Figure 2 of this reference shows lines of adhesive being applied to the material before the material is wound on the wheel. Column 5, lines 28-32, say that the lines of adhesive are chilled "into a dry, solid, non-sticky state." This teaching means that when the material is wound on the rack and then removed from the rack, adjacent surfaces are NOT bonded together. This is critical to the process disclosed by Schnebly. When the material is wound on the wheel as shown in Figure 4 the layers are curved. The patent teaches to make a radial cut through the material on the wheel and lay the material on a flat surface. Because the opposing surfaces are not bonded to one another overlaying layers move relative to one another such that the resulting stack, when placed on a flat surface, is not curved but lays flat and is trapezoidal in shape as shown in Figure 7. Schnebly teaches that the stack must be oven cured to bond the layers of material together. This is shown in Figure 10 and described at column 9, line 61, through column 10, line 60. At column 10, lines 14- 24, the reference says that the temperature and pressure applied in the oven for a sufficient period of time "permit the lines of adhesive 18 between the layers 74 to activate and bond with each other so as to adhere adjacent layers of tubular materials 74 to each other."

In the process of Applicants' claim 1 as amended the adhesive must bond together overlying surfaces of the elongated tubular structure forming a cellular structure **on the collector**. Claim 1 further requires that the cellular structure have a curvature when that structure is removed from the collector and that the curvature flatten while the cellular structure

is on a flat surface. None of this is taught or suggested by Schnebly. One skilled in the art reading Schnebly would understand that the overlaying surfaces of material should not be bonded together while the material is on the wheel because the resulting structure would be curved. A curved structure is not desirable because that structure cannot be made into an acceptable window covering. Applicants have disclosed a method and apparatus that operate in a manner contrary to the teaching of Schnebly.

The Examiner has chosen to interpret the phrase "slow cure adhesive" to apply to the polyester material disclosed by Schnebly even though there is no mention of slow curing in the reference. Moreover, Corey '296 in paragraph 0083 distinguished hot melt polyesters, like that used by Schnebly from slower curing moisture cured polyurethanes that can be used in Applicants' method. But, even if one considered the adhesive used by Schnebly to be a slow cure adhesive, Schnebly teaches against bonding overlaying layers together while the cellular structure is on the collector.

United States Published Patent Application No. 2002/0014296 and its parent United States Patent No. 6,024,819 to Corey disclose a method for making a fabric Venetian blind in which a narrow, elongated strip is helically wound around two spaced-apart rollers called spars. During the fabrication process the strip overlaps adjacent windings and is bonded to adjacent windings. The Examiner has cited paragraph 0063 of Corey '296 as teaching that polyurethane adhesives which are moisture cured and which would have been an alternative to polyesters of in the art of making blinds. It appears however that the examiner was intending to refer to paragraph 0083 where Corey says "hot melt adhesives are preferred." In that paragraph Corey also says, "Alternatively moisture-cure polyurethane hot-applied glue...has many of the same

features, plus added strength and flexibility once cured, but those benefits must be considered in light of slower curing and associated bleed through." Applicants respectfully disagrees that Corey is teaching the use of slow cure adhesives and reads this paragraph as teaching away from the use of slow cure adhesive because of the associated bleed through problem.

Even if one accepts the Examiner's reading of the cited references claim 1 as amended is patentable over those references. This is so because none of the references teach or suggest making a cellular structure on a collector in which adjacent surfaces are bonded together by a slow cure adhesive, that the cellular structure has a curvature when that structure is removed from the collector and that the curvature flattens while the cellular structure is on a flat surface.

Accordingly reconsideration and allowance of all pending claims are respectfully requested.

Respectfully submitted,

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